

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|------|--|----------|------------------|---------|------------------|
| L1 | 2 | ((neutral center) near point and corner adj point and rotat\$4 and organic adj substrate).clm. | US-PGPUB | OR | ON | 2005/11/22 14:56 |

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|--------|--|---|------------------|---------|------------------|
| S9 | 40581 | (flipchip flip adj chip flip\$1chip bga) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 18:57 |
| S10 | 108182 | substrate and (bump ball) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 18:57 |
| S11 | 9976 | underfill\$3 under?fill\$3 under adj fill\$3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 18:58 |
| S12 | 22154 | warpage | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 18:58 |
| S13 | 21552 | S9 and S10 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/21 19:59 |
| S14 | 3868 | S13 and S11 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/21 19:59 |
| S15 | 256 | S14 and S12 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/21 20:00 |
| S16 | 571061 | pad | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 19:00 |
| S17 | 35671 | solder adj (bump ball) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 19:00 |
| S18 | 34841 | S16 and (cu copper) and (au gold) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 19:00 |

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|-----|--------|-------------------------------------|---|----|----|------------------|
| S19 | 7599 | S16 with (cu copper) and (au gold) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/21 20:03 |
| S20 | 3518 | S16 with (cu copper) with (au gold) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 19:01 |
| S21 | 440892 | diffus\$4 and (met\$3 reflow\$3) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 19:01 |

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|--------|--|---|------------------|---------|------------------|
| S58 | 6446 | (257/678,737,778).CCLS. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/11/21 18:56 |
| S59 | 4399 | (438/457,106,108).CCLS. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/11/21 18:57 |
| S60 | 43015 | (flipchip flip adj chip flip\$1chip bga) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 18:57 |
| S61 | 113529 | substrate and (bump ball) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 18:57 |
| S62 | 10640 | underfill\$3 under?fill\$3 under adj fill\$3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 18:58 |
| S63 | 22810 | warpage | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 18:58 |
| S64 | 22951 | S60 and S61 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 18:59 |
| S65 | 4192 | S64 and S62 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 18:59 |
| S66 | 281 | S65 and S63 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 19:00 |
| S67 | 591993 | pad | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 19:00 |

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|-----|--------|--|---|----|----|------------------|
| S68 | 37493 | solder adj (bump ball) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 19:00 |
| S69 | 37183 | S67 and (cu copper) and (au gold) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 19:00 |
| S70 | 3695 | S67 with (cu copper) with (au gold) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 19:01 |
| S71 | 458111 | diffus\$4 and (met\$3 reflow\$3) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/21 19:02 |
| S72 | 43044 | (flipchip flip adj chip flip\$1chip bga) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/22 14:48 |
| S73 | 113591 | substrate and (bump ball) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/22 08:25 |
| S74 | 592273 | pad | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/22 08:25 |
| S75 | 37515 | solder adj (bump ball) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/22 08:25 |
| S76 | 3697 | S74 with (cu copper) with (au gold) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/22 08:25 |
| S77 | 458313 | diffus\$4 and (met\$3 reflow\$3) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/22 08:25 |

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|-----|-------|--|---|----|-----|------------------|
| S78 | 293 | S72 and S73 and S75 and S74 and S76 and S77 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/22 08:27 |
| S79 | 54 | S78 and organic near3 substrate | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/22 08:28 |
| S80 | 6 | ("6303998").URPN. | USPAT | OR | OFF | 2005/11/22 08:42 |
| S81 | 1 | "6747331".pn. | USPAT | OR | OFF | 2005/11/22 08:42 |
| S82 | 0 | ("6747331").URPN. | USPAT | OR | OFF | 2005/11/22 08:43 |
| S83 | 5 | ("3611317" "4868634" "6188582" "6303998" "6566234").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2005/11/22 08:43 |
| S84 | 3 | ((neutral center) near point and corner adj point and rotat\$4 and organic adj substrate).clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/22 14:56 |
| S85 | 43044 | (flipchip flip adj chip flip\$1chip bga) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/22 14:48 |
| S86 | 2194 | organic near substrate and (bump ball) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/22 14:49 |
| S87 | 1028 | S85 and S86 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/22 14:49 |
| S88 | 22813 | warpage | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/22 14:49 |
| S89 | 103 | S87 and S88 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/22 14:50 |
| S90 | 18 | S89 and rotat\$4 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/11/22 14:50 |

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|-----|----|--|------------------------------|----|-----|------------------|
| S91 | 0 | ("2003/0170450").URPN. | USPAT | OR | OFF | 2005/11/22 14:51 |
| S92 | 0 | ("6906425").URPN. | USPAT | OR | OFF | 2005/11/22 14:52 |
| S93 | 13 | ("4873397" "5061549" "5372883" "5401536" "5783867" "5930889" "6037657" "6084781" "6177728" "6238223" "6265776" "6297560" "6774480").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2005/11/22 14:52 |